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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/649,789	BELCASTRO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hemant M. Desai	3721	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed on 2/13/2006.
2. ☒ The allowed claim(s) is/are 1-3 and 22-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.  |

Examiner acknowledges the receipt of replacement sheet of Figure 1, and the drawing has been approved.

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alan Kopecki on 3/3/2006.

The application has been amended as follows:

#### **In the Claims:**

Insert -- of paper -- after "web", line 3, claim 1.

Insert -- of paper -- after "web", line 5, claim 1.

Insert -- of paper -- after "web", line 13, claim 1.

Insert -- including sensors and an output -- after "device", line 14, claim 1.

Insert -- feeding speed of the flexible web of paper by controlling -- after "controls", line 14, claim 1.

Delete "at least", line 17, claim 1.

Replace "paper speed", line 18, claim 1, with -- feeding speed of the flexible web of paper --.

Replace "claim 3", line 1, claim 3, with -- claim 2 --.

Replace "the speed of paper web feed", line 11, claim 22, with -- feeding speed of the flexible web of paper--.

Replace "varying the speed.....paper web speed.", lines 12-13, claim 22 with -- varying level of power of the laser beam between multiple levels greater than zero, and varying rotation speed of the multi-faceted mirror as a function of variances in the feeding speed of the flexible web of paper such that a predetermined number of holes per inch is burned in said flexible web of paper. --.

### **REASONS FOR ALLOWANCE**

1. The following is an examiner's statement of reasons for allowance: The prior art of record fails to disclose the claimed system for controlling a process for perforating a flexible web, including: a supply spindle of the flexible web mounted for powered angular rotation at variable speed, a take-up spindle for receiving a portion of the flexible web from the supply spindle mounted for powered angular rotation at variable speed, a control device that controls feeding speed of the flexible web of paper by controlling the angular rotation speed of the supply spindle and the take-up spindle, and varies the level of power supplied to the laser beam generator between multiple levels greater than zero, as a function of the feeding speed of the flexible web of paper in response to sensor inputs and control output. Regarding claim 22, varying the rotations of the multi-faceted mirror, and varying level of power of the laser beam between multiple levels greater than zero as a function of variances in the feeding speed of the flexible web of paper such that a predetermined number of holes per inch is burned in said flexible web of paper.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hemant M. Desai whose telephone number is (571) 272-4458. The examiner can normally be reached on 7:00 AM-5:30 PM, Mon-Thurs..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rinaldi I. Rada can be reached on (571) 272-4467. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Hemant M. Desai*

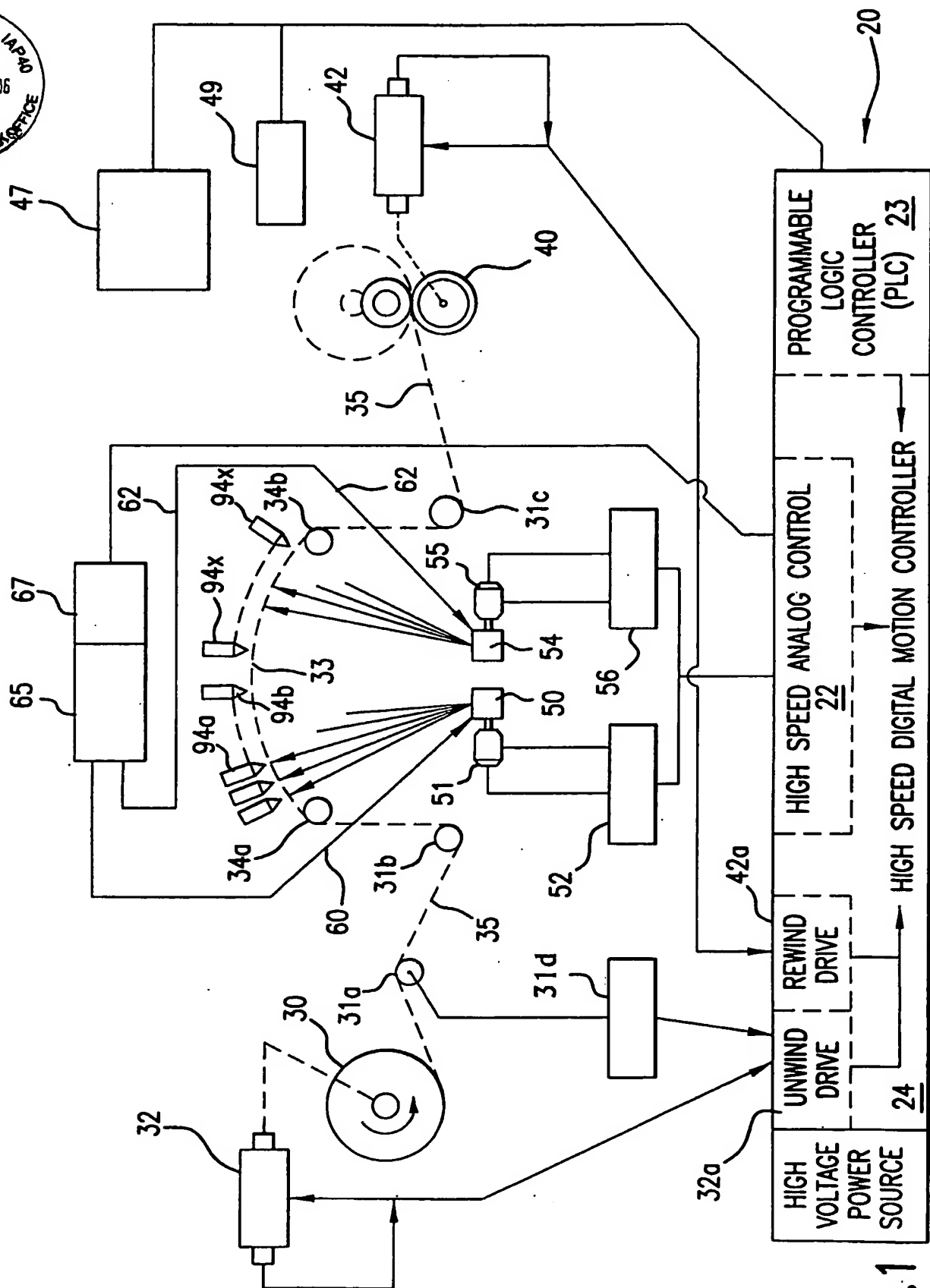
Hemant M Desai  
Examiner  
Art Unit 3721

HMD

*Louis K. Huynh*  
LOUIS K. HUYNH  
PRIMARY EXAMINER

**REPLACEMENT SHEET**  
**Appln. Filing Date:** August 28, 2003  
**Title:** HIGH SPEED LASER PERFORATION OF  
 CIGARETTE TIPPING PAPER  
**Inventor(s):** Marc D. Belcastro et al.  
**Appln. No.:** 10/649,789 Sheet 1 of 1

Sheet 1 of 1



**FIG. 1**